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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------------|------------------|-------------------------|---------------------|------------------|--|
| 10/009,021 | 03/19/2002 | Tadashi Ishibashi | 9793822-0158 | 6238 | |
| 7590 03/31/2004 | | ı | EXAM | INER | |
| David R Meta | zger | THOMPSON | THOMPSON, CAMIE S | | |
| Sonnenschein Macker Drive | Nath & Rosenthal | ART UNIT | PAPER NUMBER | | |
| PO Box 06108 | | 1774 | 1774 | | |
| Chicago, IL | 50606-1080 | DATE MAII ED: 03/31/200 | 4 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | App | ication No. | Applicant(s) | | | | |
|---|---|------------------------|---|------------------|--|--|--|--|
| | | 10/0 | 009,021 | ISHIBASHI ET AL. | | | | |
| | Office Action Summary | Exa | miner | Art Unit | | | | |
| | | | ie S Thompson | 1774 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed or | n <u>Election file</u> | ed February 3, 2004. | | | | | |
| 2a)[_ | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | | |
| 4)⊠ | Claim(s) <u>9-20,29-40 and 49-55</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) 1-8,21-28 and 41-48 is/are withdrawn from consideration. | | | | | | | |
| 6)⊠ 7)□ | 5) ☐ Claim(s) is/æ allowed. 6) ☐ Claim(s) 9-20,29-40 and 49-55 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | |
| 12) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) △ All b) ☐ Some * c) ☐ None of: 1. △ Certified copies of the priority documents have been received. 2. ☐ Copies of the certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific | | | | | | | | |
| reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. | | | | | | | | |
| 2) Notic | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-9 nation Dísclosure Statement(s) (PTO-1449) Paper | | 4) Interview Summary 5) Notice of Informal P 6) Other: | | | | | |

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DETAILED ACTION

1. Applicant's election of species 15-1 and 17-1 is acknowledged. Therefore, claims 9-20, 29-40 and 49-55 will be prosecuted based on the elected species.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 9-20, 29-40 and 49-55 rejected under 35 U.S.C. 102(e) as being anticipated by Tadashi et al., U.S. Patent Number 6,265,088.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The Tadashi reference discloses an organic electroluminescence device that comprises an organic layer having a luminescent region and is provided between an anode and a cathode. The organic layer comprises at least one distyryl compound such as

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as per instant claims 9, 29 and 49 (see column 2, line 64-column 3, line 5 and Formula (4)-2). Additionally, the reference discloses that the luminescent layer may comprise a combination of distyryl compounds as per the instant claims (see column 4, lines 10-16). Also, in column 4, lines 10-16 of the reference it is discloses that the device is able to obtain stable red luminescence with the distyryl compounds. The distyryl compounds contained in the reference have both electron transportability and hole transportability and can be used as the luminescent layer serving also as an electron transport layer or as a luminescent layer serving as a hole transport layer as per the instant claims. Figures 1-4 of the reference disclose that the device is a multilayer structure as per instant claims 10-20, 30-40 and 50-55. Column 12, lines 5-23 of the Tadashi reference discloses that a fluorescent material is incorporated into the luminescent layer to obtain red luminescence as per instant claims 17, 34 and 38. Tadashi also discloses that a hole blocking layer or an exciton-generating layer is incorporated into the luminescent region for controlling the transport of holes or electrons as per the instant claims. The Tadashi reference meets all the limitations of the instant claims.

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4. Claims 9-20, 29-40 and 49-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Ichimura et al., U.S. Patent Office 6,525,212.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Ichimura discloses an organic electroluminescence device that comprises an organic layer having a luminescent region and is provided between an anode and a cathode. The organic layer comprises at least one distyryl compound such as

$$\begin{array}{c} \mathbb{R}^1 \\ \mathbb{N} \\ \mathbb{R}^2 \end{array}$$
 CH=CH-CH-CH- $\mathbb{N}_{\mathbb{R}^4}$

as per instant claims 9, 29, and 49 (see abstract; column 2, lines 10-68). Additionally, the reference discloses that the luminescent layer may comprise a combination of distyryl compounds as per the instant claims (see column 2, lines 28-68 and column 61, lines 53-55). Also, column 1, lines 15-40 of the reference disclose that the device emits red color with the distyryl compounds. Column 74, lines 61-68 of the reference discloses have both electron transportability and hole transportability and can be used as the luminescent layer also as an electron transport layer or as a luminescent layer serving as a hole transport layer as per the instant claims. Figures 45-47 of the reference disclose that the device is a multilayer structure as

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per instant claims 10-20, 30-40 and 50-55. Also, column 75, lines 6-15 of the reference disclose a fluorescent material may be incorporated into the luminescent layer as per instant claims 17, 34 and 38. The reference discloses a hole blocking layer or an exciton-generating layer in order to improve the luminescent efficiency as per the instant claims (see column 77, lines 1-9).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 9-20, 29-40 and 49-55 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No.

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6,265,088. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant claims and the patent disclose an organic electroluminescent device comprising a cathode and an anode, an organic layer disposed between the anode and the cathode, the organic layer comprising an organic luminescent material comprising at least one distyryl compound having the general formula

$$\begin{array}{c|c} R^1 & & \\ & \vdots & \\ R^2 & & \\ \end{array}$$

7. Claims 9-20, 29-40 and 49-55 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,525,212. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant claims and the patent disclose an organic electroluminescent device comprising a cathode and an anode, an organic layer disposed between the anode and the cathode, the organic layer coraprising an organic luminescent material comprising at least one distyryl compound having the general formula

$$\begin{array}{c} \mathbb{R}^1 \\ \mathbb{R}^2 \end{array} \longrightarrow \begin{array}{c} \mathbb{R}^5 \\ \mathbb{R}^5 \end{array} \longrightarrow \begin{array}{c} \mathbb{R}^5 \\ \mathbb{R}^4 \end{array}$$

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Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (571) 272-1526. The fax phone number for the Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public FAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.usptc.gov. Shohl from have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cynth Kelly

GUTTINA M. KOMAY GUTTINA M. KOMAY MEGANASA CARANTA A